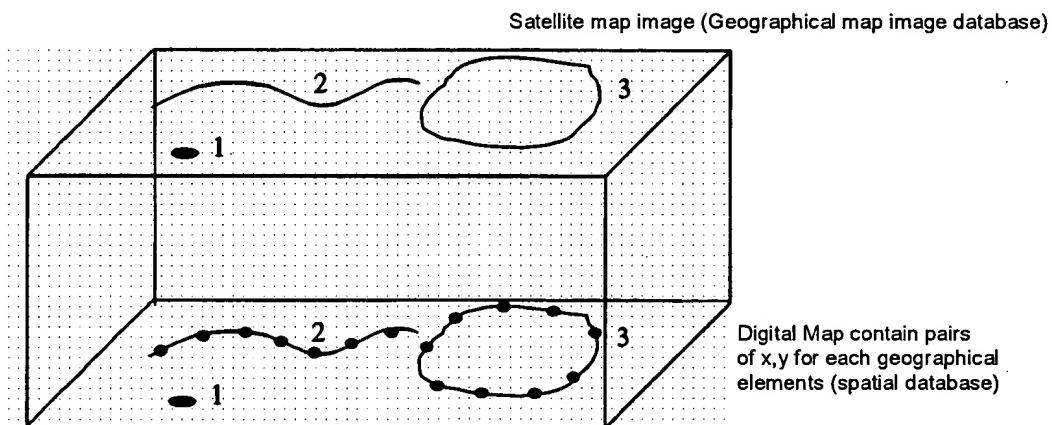


REMARKS

The last Office Action has been carefully considered.

The Examiner rejected claims 1-28 under 35 USC 103(a) as being unpatentable over Maruyama (US Patent 6,430,498 B1) in view of Budge (US Patent Publication 2002/0080408 A1) and Ogawa (US Patent 5,864,632) and Ratnakar (US Patent 6,278,432 B1). Applicants respectfully traverse this rejection for the following reasons:

The Examiner's attention is directed to the illustration shown below:



Feature	Number	Location
Point	1	x,y (single pair)
Line	2	String of x,y coordinate pairs
Polygon	3	Polygon 3 Closed loop of x,y coordinate pairs where first and last pair are the same

As shown in this illustration, the Satellite map images stored in geographical map image database comprise geographical elements 1-3. To create

a digital map for these geographical elements, the system must convert these elements into vector data (a representation of single, string or closed loop of x, y pairs). Vector data is then stored in the spatial database. No geographical elements shown in the satellite map images are directly stored in a spatial database. If a user wants to find a particular geographical position located near an intersection, the user can send a command to the spatial database. The vector data contained therein will be identified and that the requested position is precisely located.

In one system of the present invention, only the satellite map images will be compressed by wavelet method before being transferred to the users over the internet. Vector data contained in spatial database, however, is sent to the users without prior compression because it cannot be compressed by the wavelet method. By contrast, in the system in the cited patent of Maruyama, the map information (spatial information) is compressed before being sent it over the internet. According to Maruyama (col 9, lines 24-27), the map information means movies, entertainment and business events, and restaurants. Although this information is part of the spatial database, Maruyama's spatial database is only a point feature of vector data which does not represent the information derived from the satellite map images. The spatial database recited in the claimed invention, however, contained the vector data representing the point, line and polygon feature of the geographical elements derived from the satellite map images.

In Barros (USPN 6,307,573) a disclosed base map database which stores the base map elements (Barros col. 11 lines 33-35) might be analogous to our geographical map image database. However, the database disclosed in Barros is not analogous to the spatial database of the present invention. That is to say, the topical database in Barros, which stores the topical layer information (Barros col. 11 lines 38-40) such as rivers, streets, parks, etc., are merely geographical elements. These elements are not converted into the vector data and stored in the spatial database as disclosed in the system of the claimed invention. Moreover, the term "vector data" does not appear anywhere in the database disclosed by Barros.

The Examiner reasoned that claim 15, which is representative of claim 1, part (a) of the claim states that the geographical map image storage database only stores geographical map images; part (g) refers to these geographical map images as "spatial information". Applicant submits that raster image or geographical map image can be displayed by means of spatial information and map viewer or spatial information and map editor. This means that both viewer and editor can handle both types of information, namely, spatial information or geographical map image. By doing so doesn't mean geographical map image is considered spatial information.

The Examiner also reasoned that part (j) of the claim states that the spatial database only stores vector data; part (i) states that the vector data comprises "geographical elements". Applicant submits that vector data is used to

represent geographical elements. All geographical elements must be converted into vector data to enable the computer to calculate the relationship between each geographical element.

Further, the Examiner reasoned that since geographical map images are inherently comprised of geographical elements and both geographical images and geographical elements qualify as spatial information, the currently recited claims make no clear distinction between the types of data stored in the two databases. The claimed invention asserts that geographical images and geographical elements do not qualify as spatial information. Geographical images and geographical elements are merely general satellite images that cannot examine the relationship between each element. On the other hand, spatial information is information identifying real-world elements by converting them into vector data. Therefore, spatial information can be used to examine the relationship between the elements. For example, it can display how each transmission line will connect and where the interconnection points and main junctions are.

The Examiner reasoned that the spatial information database disclosed in Maruyama stores only geographical map images, since all the information stored in said database qualifies as the geographical map image information recited in the claim. Applicant would like to clarify that spatial information does not collect geographical map images because spatial information is vector data not geographical map images. According to Maruyama (col 9, lines 24-

27), it clearly states that map information means movies, entertainment and business events, and restaurants, not geographical map images as satellite images.

The Examiner additionally reasoned that the spatial information database disclosed in Maruyama only stores vector data, since all the information stored in said database qualifies as the vector data recited in the claim. Applicant directs the Examiner's attention to the explanation about vector data above. All the information disclosed in Maruyama is not vector data at all.

The Examiner reasoned that Barros (USPN 6,307,573) discloses a base map database which stores the base map elements (Barros col. 11 lines 33-35). This base map database disclosed in Barros is analogous to geographical map image database recited in the claims. Applicant believes that this might be at most just one part of the system of the present invention.

The Examiner further reasoned that Barros discloses a topical database which stores the topical layer information (Barros col. 11, lines 38-40). This topical layer information comprises geographical elements such as rivers, streets, parks, etc. Barros (col. 11, lines 28-31) qualify as the vector data recited in the claims. Applicant maintains that layer information which contain only a river or street in each layer is not vector data stored in our spatial database at all. No word vector data appears in Barros at all.

The Examiner reasoned that it follows that the topical database disclosed in Barros is analogous to the spatial database recited in the claims. Applicant states that topical database is not similar or identical with spatial database. Because satellite image can be compressed by using the wavelet method, vector data cannot use the same method. So in the system of the claimed invention, only the satellite image is compressed.

Thus, with respect to the rejection of the claims under 35 USC 103(a) over the combination of the aforementioned four cited references, it is respectfully submitted that the claims remaining in the present application including amended claims 1, 14, 15 and 28 and the claims dependent thereon are not obvious over the references alone or in combination. Claims 1 and 15 each define that the geographical map image storage database only stores the geographical map image, these geographical images aforementioned to as spatial information. The raster image or geographical map image can be displayed by means of spatial information and map viewer or spatial information and map editor. This means both the viewer and editor can handle both types of information, namely, spatial information or geographical map image. By doing so, does not mean geographical map image is considered as spatial information.

Further, the claimed invention in claims 1 and 15 provides that the spatial database only stores vector sections and that the vector data comprises "geographical elements". Vector data is used to represent geographical elements.

All geographical element must be convert into vector data for making computer calculate relationship between each geographical element. The Examiner reasoned that since geographical map images are inherently comprised of geographical elements and both geographical images and geographical elements qualify as spatial information, the currently recited claims make no clear distinction between the types of data stored in the two databases.

Applicant submits that geographical images and geographical elements do not qualify as spatial information. Geographical images and geographical elements are merely general satellite images that cannot be examined as to the relationship between each element.

On the other hand, spatial information is information identifying real-world elements by converting them into vector data. Therefore, Spatial information can be used to examine relationship between elements. For example, it can display how each transmission line will connect and where are interconnection points and main junctions. It therefore follows that the spatial information database disclosed in Maruyama stores only geographical map images, since all the information stored in said database qualifies as the geographical map image information recited in the claim.

Applicant wishes to clarify that spatial information does not collect geographical map images because spatial information is vector data not geographical map images. According to Maruyama Col 9, Line 24-27, it clearly states that map information means movies, entertainment and business event, and restaurants, not geographical map images as satellite images.

Accordingly, it is respectfully requested that the rejection be withdrawn and that the claims remaining in the present application be passed to issue.

Respectfully submitted
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Dated: November 2, 2004

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